

ABSTRACT

This present invention provides an array formed by a continuous line array of piezoelectric film with discrete points of increased sensitivity to sense and measure acoustic signals. The configuration provided by the present invention simultaneously provides the advantages and attributes of both the continuous line array and the multi-element discrete array. The line array and the multi-element array are designed to enhance or cancel specific frequency bands of signal noise and to enhance beam forming of the array. The piezoelectric array can be extended and shaped into two-dimensional and three-dimensional hydrophone arrays. The present invention comprises a continuous line array formed by a single piece of piezoelectric film with one or more points of enhanced sensitivity to alter the beam pattern or spectral sensitivity of the array. The electrical output of the entire array may be observed with one set of connectors, one positive and one negative lead.